Note: *All instructions and deliverables for today are listed on this handout. Read each part of the worksheet carefully.*
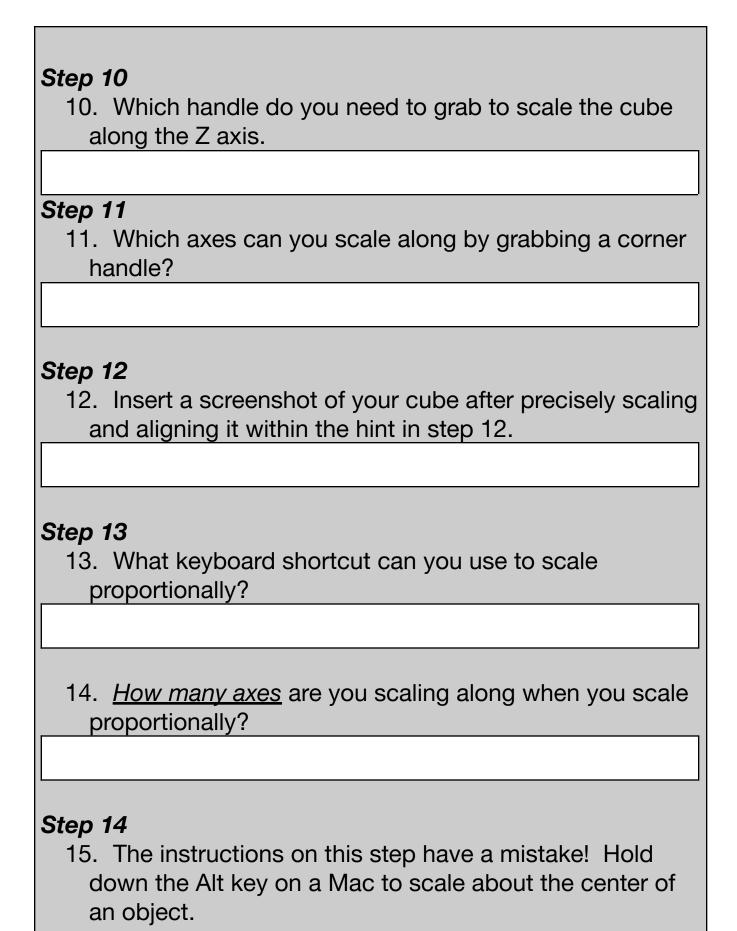
01.08 Daily Assignment

Part 1: Complete the worksheet finding the distances between points on a 2D plane.

Part 2: Project Ignite Lesson 3: Moving, Rotating, and Scaling Objects

Part 2: Project Ignite Lesson 3: Moving, Rotating, and Scaling Objects

Go to [Project Ignite](#), log in, and open "Lesson 3: Moving, Rotating, and Scaling Objects".

Begin the lesson and answer *all* questions below.

Step 3

1. What is nudging and how do you accomplish it?

2. How can you nudge along the Z axis?

3. What keyboard shortcuts allow you to nudge in larger increments?

[box]

4. Insert a ***screenshot*** of your box precisely aligned within the hint.

[box]

Step 7

5. Insert a screenshot of the _rotation handle_ that rotates the object _about the Z axis_.

[box]

6. If you rotate ***inside*** the protracter, what is the size of the rotation increments (ie. "hops")?

[box]

7. What is the size of the increments when rotating ***outside*** of the protractor?

[box]

8. Insert a screenshot of your cube after rotating it so that it is precisely aligned within the hint.

[box]

Step 8

9. After rotating about the X and Y axes, insert a screenshot showing your cube precisely aligned within the hint.

[box]

Step 10

   10. Which handle do you need to grab to scale the cube along the Z axis.

Step 11

   11. Which axes can you scale along by grabbing a corner handle?

Step 12

   12. Insert a screenshot of your cube after precisely scaling and aligning it within the hint in step 12.

Step 13

   13. What keyboard shortcut can you use to scale proportionally?

   14. *How many axes* are you scaling along when you scale proportionally?

Step 14

   15. The instructions on this step have a mistake! Hold down the Alt key on a Mac to scale about the center of an object.

Insert a screenshot of your cube after precisely scaling and aligning it within the hint in step 12.

Step 15

16. What is the keyboard shortcut for proportionally scaling about the center?

Step 16

17. How can you skew an object in TinkerCAD?

18. Insert a screenshot of your skewed cube in the space below.

Summary question: You just learned all about moving, rotating, and scaling objects. Which tool or shortcut do you think will be most useful to you when designing in TinkerCAD? Why?